## Group F, Energy Problems

- [Other] Lack of environmental accounting methods to allow comparative analysis between various energy and water technologies.
  - Water intensity of energy alternatives
  - Energy intensity of water uses/technologies
- [Extraction] Water quality impacts (real or perceived) of energy extraction methods, e.g. acid mine drainage, injection and reinjection wells.
- [Electricity Production] Aging infrastructure that requires significant capital
  to maintain and/or replace and which was not designed to meet current
  needs. This problem is exacerbated by climate change and its potential for
  increased risk of catastrophic failures.
- [Other] Lack of information or understanding of the value of water in terms of true cost, opportunity cost and spatial and temporal variation in value.
- [Extraction] Aquifer impacts of energy extraction. Limited information about and understanding of aquifer characteristics and limited funding for acquiring the necessary data.
- [Electricity Production] Regulatory and licensing requirements, lack of transmission capability and grid acceptance impede the development of distributed small scale (less than 10 MW) hydro projects.

## Group F, Water Problems

- [Urban] The lack of regional planning, coordination, implementation and management across jurisdictions and ownerships to integrate land use and water supply.
- [All] The lack of price signals for all water users.
- [All] Failure to pay attention to water conservation (supply curves of conserved water).
- [Urban] Rapidly growing populations/communities dependent on declining water supplies that have associated high and increasing energy costs, e.g. groundwater pumping or transportation.
- [All] Lack of an efficient legal/economic/policy system for water reallocation.
- [All] Aging infrastructure not designed to meet today's needs and demands.
- [Agriculture] Increasing water costs leading to changes in crop types and/or reduction in acreage that impact rural communities.